

How to make building retrofit happen in Romania?



Kick-off workshop for BPIE task force in Bucharest

Today retrofitting older, inefficient buildings across Europe is a major challenge. Retrofitting offers the potential for implementing cost-effective measures and transforming the old stock into environmentally friendly buildings, with increased social and financial value. However, today, only few countries are successfully leveraging EU funding or making effective use of available financing solutions.

The renovation of the building stock in Romania is of dramatic importance – as in most Eastern and Central European countries - and in



Local stakeholders came together at the BPIE workshop to jointly develop potential solutions adapted to local market conditions.

March 2011 BPIE launched a local task force to act as a catalyst for change.

The objectives are to bring the various stakeholders in Romania together, establish a dialogue, define market barriers which have to be overcome and finally to develop potential solutions that are adapted to national market conditions.

The first initiative of the local task force was the organisation of a workshop on 24 March, bringing together key stakeholder groups such as governmental authorities (the Ministry for Regional Development and Tourism responsible for buildings policy, the Ministry of Finance and the Ministry for the Environment), municipalities (e.g. City of Bucharest), the construction industry, housing associations, employer associations, local banks and European financial institutions managing European funding (EIB and EBRD).

The roundtable combined a mixture of presentations and discussion sessions. There were presentations on EU policy, local policy implementation in Romania, best practices such as the Czech Republic's Green Investment Scheme (based on the selling of AAUs¹ under the Kyoto Protocol), available EU funding opportunities, ESCOs² and technical solutions.



The BPIE workshop at the Bucharest Chamber of Commerce brought together key stakeholder groups such as governmental ministries, the City of Bucharest, the construction industry, housing associations, employer associations, local banks and the European financial institutions EIB and EBRD.

A lively discussion among roundtable participants helped define current barriers, identify concrete approaches to overcoming them and stimulating a more active uptake of energy efficiency investments by the Romanian market.

The key challenges, opportunities and priorities at European and national level emerging from the discussion are presented on the following pages.

¹ **AAU: Assigned amount unit.** A Kyoto Protocol unit equal to 1 metric tonne of CO₂ equivalent. Each Annex I Party issues AAUs up to the level of its assigned amount, established pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol. Assigned amount units may be exchanged through emissions trading. (Glossary of Climate change acronyms, UNFCCC)
² **ESCOs: Energy Service Companies.** An "energy service company" (ESCO) is a natural or legal person that delivers energy services and/or other energy efficiency improvement measures in a user's facility or premises, and accepts some degree of financial risk in so doing. The payment for the services delivered is based (either wholly or in part) on the achievement of energy efficiency improvements and on the meeting of the other agreed performance criteria (Directive 2006/32/EC).

Romania's Refurbishment Programme



In Romania, a thermal rehabilitation programme for multi-level residential buildings built before 1985 had been launched in 2002, coordinated by the Ministry of Regional Development and Tourism.

After years of hesitation the programme was re-launched in 2007 as part of the first National Energy Efficiency Action Plan (under the 2006/32/EC Directive). The aim of the programme was to decrease heating energy consumption in renovated buildings from an actual estimated energy consumption of 180-240 kWh/m² to below 100 kWh/m².

The financing was divided between the national budget (34%), the local budget (33%) and the owner's contribution (33%). However, several local administrations decided

to cover also the owner's contribution and, in some cases, the thermal renovation was a cost-free measure for the owners.

The measures could comprise thermal rehabilitation of the external walls, basement floors and roofs, the replacement of the existing windows and external doors with double-glazed ones, the thermal insulation of the basement pipes and painting of the exterior walls (for aesthetic reasons).



In 2008, 89 blocks of flats (2 551 apartments) were rehabilitated. In 2009, after the entry in force of OUG 18/2009, 24 834 apartments were rehabilitated (budget split: 50% State budget, 30% local budget, 20% owner associations) and in 2010, the rehabilitation of 29 000 apartments was foreseen and the start of works on a further 25 000 apartments (OUG 18/2009 allowed 20% to be also supported by local budget).

The thermal rehabilitation programme safeguarded employment in the construction industry during a deep period of recession and it is estimated that it created nine times more employment than the investments in new energy capacities.

In 2010 a Government Ordinance (OUG 69/2010) changed the financial conditions for thermal rehabilitation of the buildings by eliminating the State grants and introducing the 100% State guarantee for dedicated loans up to 5 years. The interest on these loans was supposed to be covered by the State, within the limit of an annually approved budget. Moreover, local authorities financed up to 30% of the eligible costs, responding to the request of the owners' associations.



Photos courtesy of the
Ministry for Regional
Development and Tourism

Challenges

- **Access to available EU funds**

The European Union has launched several funding programmes, (such as those from the EIB) which are not sufficiently utilised by Member States. The lack of uptake in Romania is partly due to bureaucratic burdens though the major constraint for not utilising EU funds is the level of required national leverage. National budgets need to complement EU funds sometimes up to 50%, which is especially challenging in times of economic and financial crisis.

EU fund applications are complex to manage and the difficult administrative processes at national level multiply this complexity. In Romania at least three governmental authorities need to be involved, which often results in paralysis.

- **Lack of long-term commitment from governments**

While the issue of large-scale building retrofit is high up the political agenda at election times, the matter rapidly dwindles in importance afterwards. The political priority goes to other issues, especially in times of crisis; the opportunity to leverage economic and social benefits is not being fully exploited.

The current Romanian government has a project-based approach. There is no clear long-term commitment from the State that could send appropriate signals to the market. For budget reasons, existing national programmes are all too frequently terminated before they can have an enduring impact, leading to a lack of predictability for banks and investors. State administrations do not demonstrate long-term commitment to programmes and do not implement the necessary communication actions around them (for public information and acceptance).

- **Misalignment between national programme design and market needs**

The Romanian refurbishment programme (re)launched in 2010 introduced state guaranteed loans with up to 100% subsidised interest rate to residential house owners and owners of apartments that have to be repaid within five years. The credit represents €1 850 /room with a maximum of € 7 400 for a family house (according to information from the Ministry of Development and Tourism). While the total amount is quite high by national standards, the maximum five year reimbursement period for these loans is too short (in the Czech Republic and Germany for example the duration of a loan is generally 15 years). This is a major issue for local banks as well as for real estate owners. The short payback time leads to excessively high monthly loan repayments, which are not in line with energy savings and are generally unrealistic for the Romanian market. This issue is accentuated by the fact that owners in Romania are reluctant to take on loans. It must be added that banks have much stricter conditions during an economic downturn.

- **Lack of consumer motivation and demand**

In the context of the European economic and financial crisis (which has led to significant job losses in Romania's construction industry), consumers prefer to focus on short-term benefits while investments in housing are perceived as long-term despite the immediate impact on comfort/quality of life. On top of that, as in many European countries, the belief in purely environmental benefits is absent and there is a lack of motivation in that area. Romanian consumers need support in the form of financial incentives and information. In terms of information, campaigns are needed to raise awareness for existing programs, providing tangible information on economic, social and environmental benefits and especially for establishing credibility. In particular, improving the energy performance of residential buildings has a high job creation potential and this issue is not sufficiently addressed at the moment.



Untapped opportunities

- **Data scarcity hinders a clear vision of the potential of the Romanian building stock**

Precise data on the existing Romanian building stock, on CO₂ emissions and the energy saving potential, are scarce. This absence of a clear vision hinders the effective design of programmes, creating probably lock-in effects and hindering the full exploitation of the cost-optimal savings potential. A better knowledge of the situation and performance potentials would also help to define realistic payback periods. National investment schemes should be based on life-cycle costs and on cost-optimal levels of renovation.

- **Quality renovations that optimise on environmental and economic benefits**

It is essential that renovation programmes be realised in the most effective way based on defined criteria. Environmental, economic and social benefits should be addressed simultaneously. The implementation of building renovation should be performed in a technically correct way and realise the cost-optimal potential. Also the importance of certification of materials such as windows and insulation material, are also key in this context. The *National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development (URBAN-INCERC)* acts under the authority of the Ministry of Regional Development and Tourism as the responsible body for quality checks and data collection.

- **Transfer of best practices and innovation**

Alongside EU funding, there exist additional opportunities, such as the Green Investment Scheme in the Czech Republic (see page 5). Member States should take into consideration the successful models and innovative investment schemes that already exist across Europe and try to adapt them to their national market conditions (regulation, industry, and workforce). Other examples alongside the GIS scheme are preferential loans as offered by the German bank KfW and the UK PAYS model³.



- **Sufficient leverage of money from the trade of emission credits under the Kyoto Protocol**

An additional financing source for thermal rehabilitation programmes may be obtained by trading the emission credits under the Kyoto Protocol (the AAUs). The national government should ensure that money from the AAUs sales are systematically allocated to cost-effective green investments such as those that increase the energy performance of the residential buildings.

- **ESCOs and energy services providers could play a bigger role on the Romanian market**

ESCOs could help to create an energy efficiency market and address difficult market barriers. They could also play an important role by attracting third party financing as a complement for public funds and by improving the level of expertise on the market. The Romanian ESCO market is currently underdeveloped and in need of active stimulation and (steady) support through local and/or central authorities. However, an effective support of ESCOs implies addressing the rather sceptical attitude among the Romanian public towards energy efficiency and ESCOs. The current EU policy discussion on ESCOs could help to define how ESCOs need to work with companies. Municipalities could be the gateway for ESCOs.

Green Investment Scheme in the Czech Republic: - a best practice example

Emissions trading under the Kyoto Protocol allow countries that have international targets and thus emission units (AAUs) to spare, to sell this excess capacity to countries with targets that are above their targets. The Central and Eastern European countries have an estimated 8 to 12 billion surplus governmental emissions rights (AAUs).

The Green Investment Scheme (GIS) has been introduced to address the "hot air" situation. Under GIS, revenues from sales of surplus AAUs are invested in environmental improvements in the selling nation, in particular in GHG reduction measures. Improved energy efficiency in buildings provides a prime example of such opportunities.

In the Czech Republic, the priority area for the Green Investment Scheme is the building sector. It provides for both, soft and hard greening, which include building retrofitting.

Five percent of AAU revenues are used for administrative purposes, 95 percent for the projects and programmes themselves. Beneficiaries include owners of family houses and apartment buildings.

The project lifetime is 15 years. Beneficiaries can apply for the funding upfront, however the money flows after the implementation of the projects or shortly before they are finalised.

Projects must be completed within 18 months and have to be finalised before the scheme is closed. The programme runs from April 2009 to mid-2012.

Members of the Union of Czech and Moravian Housing Co-operatives will be able to utilise subsidies from this programme to a large extent.

It is estimated that approximately 30 – 50 000 flats will be renovated each year. This number could reach 90 – 150 000 in total.

The value of heating energy savings is estimated at €37 million and 75 000 tons of CO₂.



Photos courtesy of CECODHAS

Priorities and action points at national level

- Create increased political commitment for energy efficiency investments.
- Generate the necessary knowledge (data collection & analysis) to develop a clear market vision and define levels of ambition.
- Design long-term programmes based on market understanding, offering enough flexibility to bundle European and private funding. Assure hereby a holistic view of building renovation.
- Analyse the adaptability of the Green Investment Scheme to the Romanian market.
- Develop key performance indicators (KPI's) for the national programmes in terms of energy performance, costs and quality, (energy audits and EPC's are always the starting point).
- Explore potential third party financing schemes addressing institutional barriers that hinder EU funds from being used.
- Involve more pro-actively the private sector and other relevant stakeholders.
- Create consumer awareness and credibility for the need to invest in energy efficiency.
- Create of a central place where all stakeholders can access consolidated information (one-stop-shop).
- Develop information campaigns based on tangible benefits.

³ **PAYS: Pay as you save scheme:** In 2010, the UK Government launched a two years pilot programme (for England only) entitled Pay as You Save (PAYS). The programme intends to compensate the upfront cost of installing energy efficiency and micro-generation measures in homes with repayments less than the savings and over a substantial period of time. The financing is linked to the property rather than individual and it is following it in the case of sale. The pilot programme budget is at around 4 million GBP. A final report is expected in April this year. For more information please see also J. Prain's presentation. Home Energy Pay As You Save (PAYS) Pilot Update on the BPIE website (www.bpie.eu), proceedings of the BPIE Roundtable on Financing Energy Efficiency in European Buildings, Brussels, 16.11.2010.

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